REMARKS

The present document is filed in response to the final Official Action dated June 10, 2009. The Official Action rejected all of the pending claims under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,953,340 to Scott *et al.* ("*Scott*"). Applicants thank the Examiner for the courtesies extended to Applicants' attorney during telephone interviews conducted on July 1 and 16, 2009, during which times the scope and content of Claim 1 and *Scott* were discussed.

By this document, all of the existing claim rejections are hereby traversed. Reconsideration of the claims in view of the preceding amendments and the following remarks is respectfully requested.

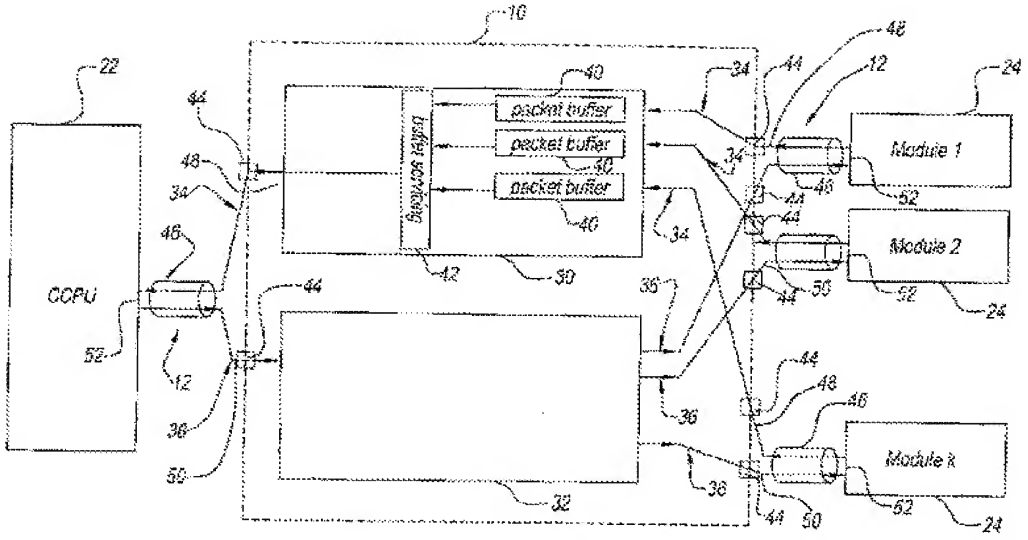
Independent Claim 1 reads:

> 1. A network communication device for bi-directional communication networks, comprising:
>
> a first portion communicably connectable to a first point and a second point on the bi-directional communication network, said first portion being configured to manage collisions among a first set of messages transmittable from said first point to said second point; and
>
> a second portion communicably connectable, in parallel with said first portion, to said first point and said second point, said second portion being configured to transmit free of collision management a second set of messages transmittable from said second point to said first point.

Independent Claims 10 and 18 similarly recite a communication device and a method of communicating on a communication network, respectively, that involve a hub portion and a switch portion connected in parallel.

As an example of the above, the specification of the present application states, in describing Fig. 4 (reproduced below), that...

> In the exemplary embodiments of FIGS. 3 and 4, switch and hub portions 30, 32 are illustrated as separate analog and digital devices . . . device 10 is a bi-directional network communication device that transmits messages in a first direction in a first manner, but transmits messages in a second direction in a second manner.



See ¶¶ [0025] and [0027] of the present application. As shown in Fig. 4 of the present application, messages from the modules (**24**) to the CCPU (**22**) are transmitted via the switch portion (**30**) but not the hub portion (**32**), and messages from the CCPU (**22**) to the modules (**24**) are transmitted via the hub portion (**32**) but not the switch portion (**30**).

In rejecting Claim 1, the Official Action states that *Scott* discloses:

> a first portion (see Figure 5 reference numeral 172, switch module)
>
> ***
>
> a second portion (see Figure 5 reference numeral 176, repeater module) communicably connectable, in parallel with the first portion (see Figure 5, switch module 172 is connected in parallel with repeater module 176), to the first point and the second point (see Figures 4 and 5, a first point corresponds to the second domain 16 and a second point corresponds to the first domain 14, where the first domain and second domain are interconnected via connector ports 154),

See p. 3 of the Official Action. However, Applicants respectfully submit that the combination of Figs. 4 and 5 of *Scott* do not disclose "a first portion communicably

connectable to a first point and a second point and configured to manage collisions" and a "second portion connectable, in parallel with said first portion, to said first point and said second point, said second portion being configured to transmit free of collision management" as recited, in one form or another in each of independent Claims 1, 10, and 18.

Scott is generally directed to an adaptive networking device including a switch module having several ports and operable according to a first protocol and a repeater module also having several ports and operable according to a second protocol." *See* Abstract. In describing Fig. 5, *Scott* states...

> Referring now to FIG. 5, a schematic diagram is shown of an adaptive networking device 152, which is implemented according to one embodiment of the adaptive networking device 151 of FIG. 4

See col. 9, ll. 24-27. As such, the device of Fig. 5 of *Scott* is an embodiment of the device of Fig. 4. Of the device of Fig. 4, *Scott* says...

> In one embodiment described herein, the switch domain 14 and the repeater domain 16 are independent, though the domains 14, 16 may be coupled externally for data transfer there-between. In another embodiment described herein, the domains 14 and 16 are internally coupled for enabling data transfer between the first domain 14 and the second domain 16.

See col. 9, ll. 17-23. *Scott* then goes on to describe the embodiments illustrated in Figs. 5 and 6, and a holistic reading of *Scott* makes it clear that the above statement indicating that "the domains 14, 16 may be coupled externally for data transfer there-between. In another embodiment described herein, the domains 14 and 16 are internally coupled for enabling data transfer between the first domain 14 and the second domain 16" is intended to apply to the devices of Figs. 5 and 6, respectively. Of the system of Fig. 5, *Scott* says...

> Data devices operating according to either the first domain 14 or the second domain 16 are coupled to the appropriate module 172 or 176, respectively, as described previously. Furthermore, devices in the first domain 14 operate in switch mode thereby significantly reducing extraneous traffic for the first domain 14. An external connection [can be included] between the first and second domains, such as with a bridge device or the like . . .

See col. 10, ll. 8-14. Therefore, *Scott* discloses several embodiments, for which the first and second domains are either independent (as in Fig. 4), are coupled for external transfer (as in Fig. 5), or are internally coupled (as in Fig. 6). In each case, devices in one domain are associated with a specific switch or repeater module (172, 176).

The device of Fig. 5 operates such that "the domains 14, 16 may be coupled externally for data transfer there-between" via a "bridge device." The "bridge device" is discussed in more detail with respect to Fig. 2, about which *Scott* says...

> In the embodiment of FIG. 2, uplink ports 36 and bridge ports 38 are not switchable. Therefore, uplink port 36a and bridge port 38a communicate with first repeater module 62, and uplink port 36b and bridge port 38b communicate with second repeater module 64.

See col. 7, ll. 7-11. *Scott* further describes the operation of the bridge device, saying...

> Bridge ports 38 couple devices in first domain 14 and devices in second domain 16 to bridge 40 and bridge 42, respectively . . . Bridges 40 and 42 allow data to be communicated between first domain 14 and second domain 16, as represented by link 44
> * * *
> Data device 18 in first domain 14 communicates data to data device 26 in second domain 16 using bridges 40 and 42. Data device 18 transmits data at a first rate to adaptive repeater 12. Adaptive repeater 12 retransmits the data received from data device 18 to other devices coupled to adaptive repeater 12 operating at the first rate, including bridge 40. Bridge 40 operating, at least in part, at the first rate re-transmits the data to bridge 42 using link 44. In bridge 40 or bridge 42, the data at the first rate is converted into data at a second rate, and bridge 42 re-transmits this data to port 38b of adaptive repeater 12. The data, now at the second rate, is then re-transmitted to the devices coupled to adaptive repeater 12 operating at the second rate, including data device 26.

See col. 5, l. 19 – col. 6, l. 22. Tracing the path of communications using the device of Fig. 5 of *Scott* as described above, and keeping in mind that the adaptive repeater (**12**, Fig. 2) includes a first repeater/switch module (**62** of Fig. 2 or **172** of Fig. 5) associated with a first domain/data rate and a second repeater/switch module (**64** of Fig. 2 or **176** of Fig. 5) associated with a second domain/data rate, one finds that messages from the first to the second domain traverse the following path: first domain data device (18) → switch/repeater module (62, 172) → bridge port (38a) →

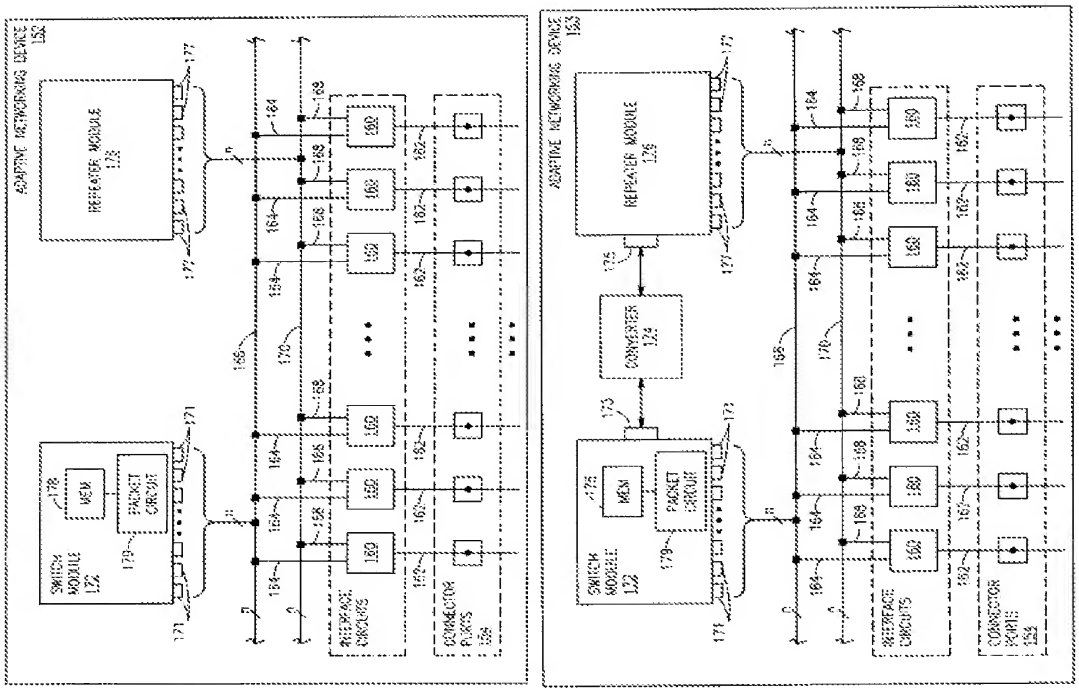
bridge (40) → link (44) → bridge (42) → bridge port (38b) → switch/repeater module (64, 176) → second domain data device (26). A communication from the second domain to the first domain would travel the opposite path.

Overall, it appears that any communication from one domain to another in *Scott* necessarily travels through each of the switch/repeater modules associated with each domain. Therefore, *Scott* does not disclose a device including "a first portion communicably connectable to a first point and a second point and configured to manage collisions" and a "second portion connectable, in parallel with said first portion, to said first point and said second point, said second portion being configured to transmit free of collision management" as recited, in one form or another in each of independent Claims 1, 10, and 18.

With respect to Fig. 6 of *Scott*, the Official Action states that

> On March 17, 2008, the Examiner conducted an interview with the Applicant's attorney, Richard Emery. During the interview, the Examiner discussed the differences between Figure 4 of the application and Figure 6 of Scott et al. (USPN 5,953,340). The Examiner generally agreed that Figure 6 of Scott fails to disclose a network communication device having first and second portions that are respectively communicably connectable, *in parallel with one another*, to a first point and a second point on a bi-directional communication network.

See p. 2 of the Official Action. The Official Action immediately goes on to indicate that Fig. 5 of *Scott* remedies the deficiency noted in Fig. 6. However, Applicants cannot identify any difference between Fig. 5 and Fig. 6 of *Scott* that would support the assertion that *Scott* fails to disclose a parallel connection in Fig. 6, but discloses such a parallel connection in Fig. 5. Figs. 5 and 6 of *Scott* are reproduced below, side-by-side, in order to facilitate comparison.



The primary difference between the systems of Figs. 5 and 6 is the presence in the system of Fig. 6 of the "converter" (**174**) between the "switch module" (**172**) and the "repeater module" (**176**), which converter is absent from the system of Fig. 5. Applicants respectfully submit that the absence of the "converter" in Fig. 5 does not in any way amount to a teaching of "a first portion communicably connectable to a first point and a second point and configured to manage collisions" and a "second portion connectable, in parallel with said first portion, to said first point and said second point, said second portion being configured to transmit free of collision management" as recited, in one form or another in each of independent Claims 1, 10, and 18.

For at least the above reason, Applicants respectfully submit that each of independent Claims 1, 10, and 18, and also the claims depending therefrom, are patentable over *Scott*.

Conclusion

In view of the remarks and amendments presented above, it is respectfully submitted that the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. The

Examiner is requested to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 07-0868.

Respectfully submitted,

/Richard D. Emery/
Richard D. Emery
Registration No. 58,894

GE Global Research
One Research Circle
Niskayuna, NY 12309
Telephone (518) 387-6304
Customer No. 006147
August 10, 2009